DAYLIGHTING:
Saves Energy and Energizes People

SEATTLE PARKS AND RECREATION

YESLER COMMUNITY CENTER

Percent of Available Outdoor Light Filling the Indoors:
THE DAYLIGHT FACTOR:

The different colors on the legend represent the ratio of indoor brightness to outdoor brightness on an overcast day. For example, a measurement of 4 means that the light level inside is 4% of the light level outside. This "daylight factor" is appropriate for the room and gives a good idea of how bright it is outside and how little light we need inside!

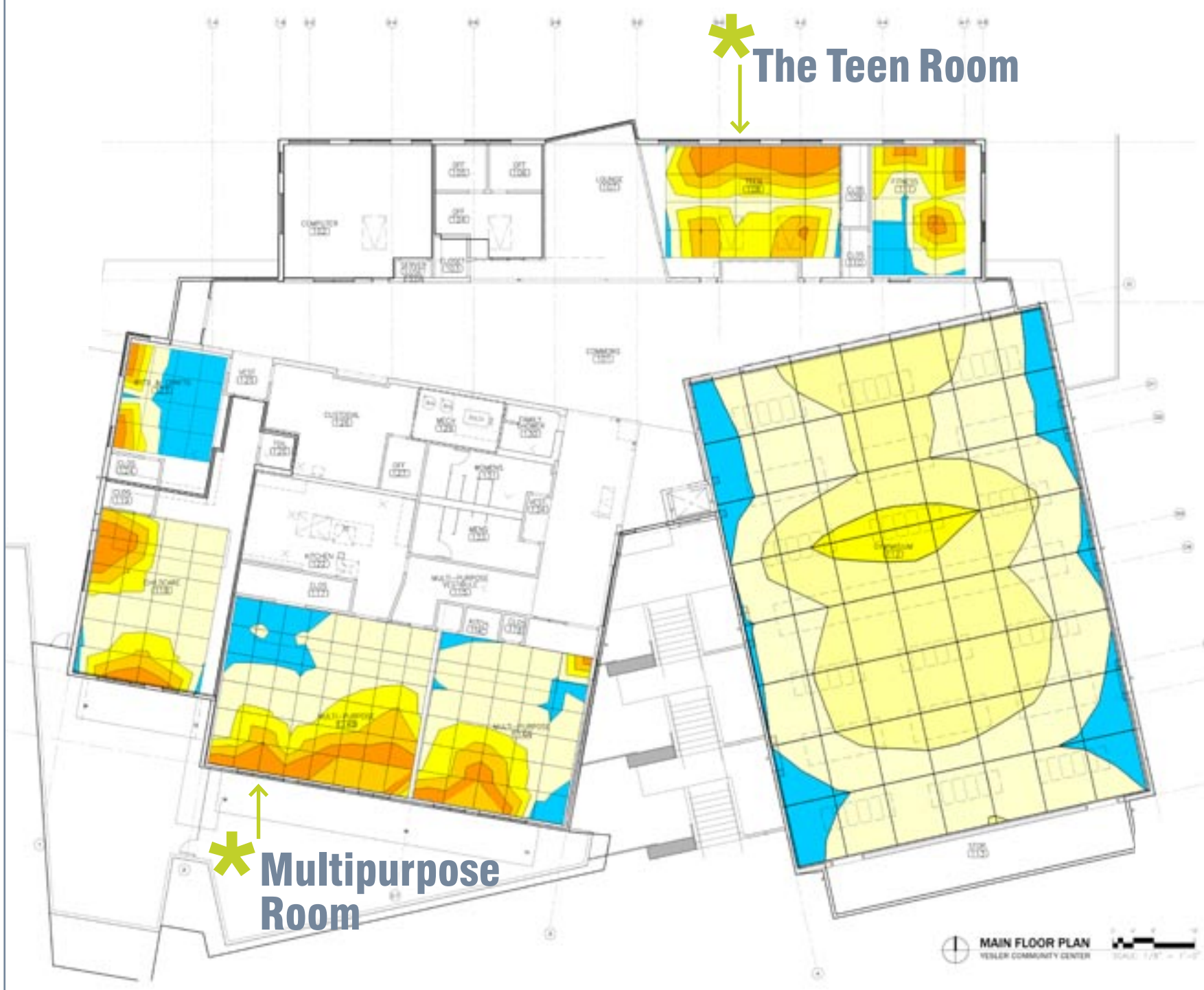
- 10.0-12.0
- 8.0-10.0
- 6.0-8.0
- 4.0-6.0
- 2.0-4.0
- 0.0-2.0

THE PLAN:

If the color is blue the room has adequate daylight;
If the color is yellow to orange it has high levels of daylight.

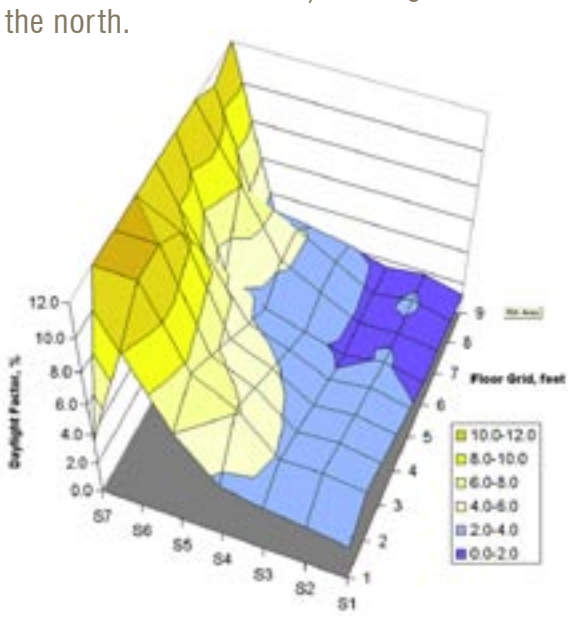
The Seattle Daylighting Lab measured daylighting levels in key areas of the building.

Look around you and see where skylights and windows bring in light.



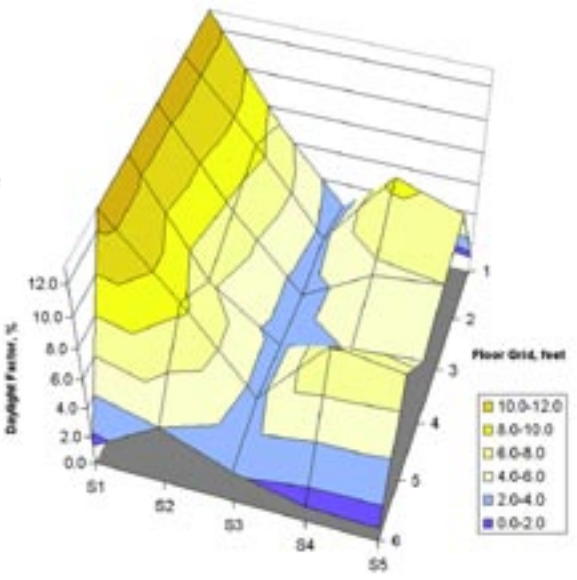
Multipurpose Room

Daylight is balanced by lighting several sides of the room. Notice windows on the south (with shading for the hot summer sun) and high roof monitors on the north.



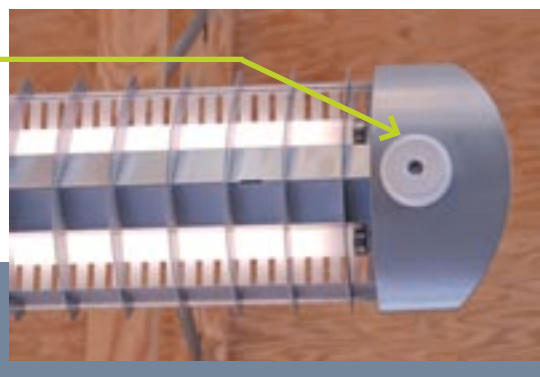
The Teen Room

This three-dimensional graph shows light levels - notice how the light is brightest at the windows and below the skylights.



Photocells

tell lights to dim when sunlight is adequate



USE DAYLIGHT TO SAVE ENERGY:

Reduced Energy Use:

Buildings consume between 30-40 percent of all the energy in the United States. The less energy we use, the less CO_2 is emitted into the air and the cheaper the energy bills. Rooms with daylighting have dynamic and changing light, providing a richer and more satisfying indoor environment.

The architects and the Seattle Daylighting Lab used physical models and lighting chambers to study the best locations for windows, skylights and roof monitors to let in sun light while reducing glare.

How is Energy Saved? Known as "daylight harvesting," photocells measure light in the room and dim electric lights when the sun is bright.

USER TIPS:

Check that lights are turned off when daylight is adequate.

Check that sensors in the room are working. Don't be surprised if lights dim or turn off. They are saving energy.